1. (Currently Amended) A polymer, comprising: ~~made of~~

(i) at least one non-brominated monomer; and

(ii) at least one brominated monomer having the structure A-B-C, wherein

A is a phenyl substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl[[,]] optionally substituted with 1 to 8 bromine atoms, and

C is an acrylic or methacrylic group,

wherein the ~~said~~ polymer comprises a bromine content ~~being characterized in having bromine contents~~ of 20% (w/w) or more, and the polymer comprises at least one non-brominated monomer having a Tg lower than 0°C or the polymer has a Tg lower than 0°C.

2. (Currently Amended) [[A]] The polymer according to claim 1, wherein said phenyl is substituted with 5 bromine atoms.

3. (Currently Amended) [[A]] The polymer according to claim 1, wherein said alkyl is CH_2.

4. (Currently Amended) [[A]] The polymer according to claim 1, wherein said acrylic group is acrylate.

5. (Currently Amended) [[A]] The polymer according to claim 1, wherein said brominated monomer is penta bromo benzyl acrylate (PBBMA).

6. (Currently Amended) [[A]] The polymer according to claim 1, wherein said bromine ~~contents~~ content is 60-70%.

7. (Currently Amended) [[A]] The polymer according to claim 1, wherein said bromine content is 25-50%.

8. (Currently Amended) [[A]] The polymer according to claim 1, wherein said bromine content is 20-35%.

9. (Currently Amended) [[A]] The polymer according to ~~any one of the preceding claims~~ claim 1, ~~having a~~ wherein the non-brominated monomer ~~that~~ is a specialty monomer.

10. (Currently Amended) [[A]] The polymer according to the ~~preceding~~ claim 9, wherein said specialty monomer is selected from monomers that are cross-linking, surface active, and/or adhesion promoting.

11. (Currently Amended) [[A]] The polymer according to claim 9 wherein said specialty monomer is selected from sodium salt of 2-acrylamido-2-methyl propane sulphonic acid, betal-carboxymethyl acrylate, ammonium allyloxypolyethoxy(10)sulphate, laurethoxy(23)methacrylate, laurethoxy(25)methacrylate, allyl methacrylate, and hydroxyl ethyl methacrylate, glycidyl methacrylate, ammonium salt of α-sulfo-ω-[1-(Alkoxy)methyl-2-(2-propenyloxy)ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl), ammonium salt of α-[1-(Alkoxy)methyl-2-(2-propenyloxy)ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl), ditrimethylo propane tetraacrylate, ethoxilated trimetholopropane triacrylate, and trimethylo propane acrylate.

12. (Currently Amended) [[A]] The polymer according to ~~any one of claims 1 to 8~~ claim 1, ~~having a~~ wherein the non-brominated monomer is selected from the group consisting of acrylic monomers, vinyl acetate, ~~and~~ styrene, and [[or]] a styrene derivative.

13. (Currently Amended) [[A]] The polymer according to claim 12 ~~the preceding claim~~, wherein said acrylic monomer is selected from the group consisting of acrylamide, acrylic acid,

acrylonitrile, butyl acrylate, ethyl acrylate, 2-ethyl hexyl acrylate, and methyl methacrylate.

14. (Currently Amended) [[A]] The polymer according to ~~any one of claims 1-8~~ claim 1, having a non-brominated monomer of the formula $R_1CH=CR_2C(O)A$, wherein

A is selected from the group consisting of OR_3, NR_3R_4, and CN; and

R_1 and R_2 are each independently selected from H and alkyl, said alkyl being linear or branched, and

~~each of~~ R_3 and R_4 are each independently selected from ~~may be~~ H, alkyl, alkenyl, alkoxy, polyalkoxy, alkanol, or ether, each of which may be linear or branched, substituted or unsubstituted.

15. (Currently Amended) [[A]] The polymer according to ~~the preceding~~ claim 14, wherein the carbon-containing R groups ~~have~~ each independently comprise between 1 and 15 carbons.

16. (Currently Amended) [[A]] The polymer according to ~~the preceding~~ claim 14, wherein the alkyl groups ~~have~~ comprise between 1 and 4 carbon atoms.

17. (Canceled)

18. (Currently Amended) A mixture comprising a polymer according to ~~any one of the preceding claims~~ claim 1 and more than one surface active agent.

19. (Currently Amended) [[A]] The mixture according to ~~the preceding~~ claim 18, further ~~containing~~ comprising antimony oxide.

20. (Currently Amended) An aqueous dispersion, comprising:

a polymer ~~made of~~ comprising a bromine-containing monomer having the structure A-B-C, wherein

A is a phenyl, substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl[[,]] optionally substituted with ~~one~~ 1 to 8 bromine atoms, and

C is an acrylic or methacrylic group; and

at least one non-brominated monomer, ~~characterized in that said~~

wherein the polymer comprises a bromine content of at least 20 % (w/w) and the dispersion ~~has~~ comprises a solid content of at least 40%.

21. (Currently Amended) [[An]] The aqueous dispersion according to claim 20, wherein said phenyl is substituted with 5 bromine atoms.

22. (Currently Amended) [[An]] The aqueous dispersion according to claim 20, ~~or 21~~ wherein said alkyl is CH_2.

23. (Currently Amended) [[An]] The aqueous dispersion according to claim 20, wherein said brominated monomer is PBBMA.

24. (Currently Amended) [[An]] The aqueous dispersion according to claim 20, wherein said polymer ~~is according to any one of claims 1 to 17~~ comprises:

at least one non-brominated monomer; and

at least one brominated monomer having the structure A-B-C, wherein

A is a phenyl substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl optionally substituted with 1 to 8 bromine atoms, and

C is an acrylic or methacrylic group,

wherein the polymer comprises a bromine content of 20% (w/w) or more, and the polymer comprises at least one non-brominated monomer having a Tg lower than 0°C or the polymer has a Tg lower than 0°C.

25. (Currently Amended) [[An]] The aqueous dispersion according ~~to any one of claims 20 to 24~~ claim 20, further comprising at least two different surface active agents.

26. (Currently Amended) An aqueous dispersion according to ~~the preceding~~ claim 25, wherein one or more of said surface active agents is an alkyl aryl.

27. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 20 to 26~~ claim 20, further ~~containing~~ comprising antimony oxide.

28. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 20 to 27~~ claim 20, consisting essentially of solid particles in aqueous solution, wherein the size of said solid particles is less than 2000nm.

29. (Currently Amended) [[An]] The aqueous dispersion according to ~~the preceding~~ claim 28, wherein said size is between 50 and 1000nm.

30. (Currently Amended) [[An]] The aqueous dispersion according to ~~the preceding~~ claim 29, wherein said size is between 80 and 400 nm.

31. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 20 to 30~~ claim 20, wherein said polymer has a density of 1.2g/cc or more.

32. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 19 to 30~~ claim 20, wherein said polymer has a molecular weight of 500,000 and above.

33. (Currently Amended) [[An]] The aqueous dispersion according to ~~the preceding~~ claim 32, wherein said polymer has a molecular weight of 1,000,000 or above.

34. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 20 to 33~~ claim20, which is stable for at least six months in -7-35°C with no direct sunlight.

35. (Currently Amended) [[An]] The aqueous dispersion according to ~~any one of claims 20 to 33~~ claim 20, which is stable for at least six months in 5 to 35°C with no direct sunlight.

36. (Currently Amended) A product comprising antimony oxide and a polymer ~~made of~~ comprising at least one bromine-containing monomer and at least one non-brominated monomer, wherein said product is fire-retardant.

37. (Currently Amended) [[A]] The product according to claim 36, wherein said polymer, comprises:

at least one non-brominated monomer; and

at least one brominated monomer having the structure A-B-C, wherein

A is a phenyl substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl, optionally substituted with 1 to 8 bromine atoms, and

C is an acrylic or methacrylic group,

wherein the polymer comprises a bromine content of 20% (w/w) or more, and the polymer comprises at least one non-brominated monomer having a Tg lower than 0°C or the polymer has a Tg lower than 0°C ~~is according to any one of claims 1 to 17~~.

38. (Currently Amended) [[A]] The product according to claim 36 ~~or 37~~, comprising a textile, said textile being printed, sprayed, or impregnated with an aqueous dispersion ~~according to any one of claims 27-35~~ , comprising:

antimony oxide; and

a polymer comprising

a bromine-containing monomer having the structure A-B-C, wherein

A is a phenyl, substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl optionally substituted with 1 to 8 bromine atoms, and

C is an acrylic or methacrylic group; and

at least one non-brominated monomer;

wherein the polymer comprises a bromine content of at least 20 % (w/w) and the aqueous dispersion comprises a solid content of at least 40%.

39. (Currently Amended) [[A]] The product according to claim 38, wherein said non-brominated monomer is hydrophobic.

40. (Currently Amended) [[A]] The product according to claim 39, wherein said hydrophobic monomer is selected from the group consisting of butyl Acrylate, 2-ethyl hexyl acrylate, styrene, and styrene derivatives.

41. (Currently Amended) A method for fabricating a fire-retardant textile, comprising printing, spraying or impregnating a textile with an aqueous dispersion, ~~which is~~ according to claim 20 ~~any one of claims 20-35~~.

42. (Currently Amended) A method for improving the hydrophobicity of a textile, comprising printing, spraying, or impregnating said textile with an aqueous dispersion according to claim 20 ~~any one of claims 20 to 35~~.

43. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 42, wherein the polymer dispersed in said dispersion ~~includes~~ comprises a hydrophobic non-brominated monomer.

44. (Currently Amended) [[A]] The method according to claim 41, wherein said hydrophobic non-brominated monomer is selected from the group consisting of butyl Acrylate, 2-ethyl hexyl acrylate, and styrene.

45. (Currently Amended) A method for obtaining an aqueous dispersion of a co-polymer ~~containing~~ , comprising:

~~at least a first monomer and a second monomer, wherein said~~ providing a second monomer that is at least partially dissolved in ~~said~~ a first monomer comprising a brominated aromatic compound, and

~~reacts to polymerize therewith~~ polymerizing the first polymer and the second monomer in the presence of water and surfactants~~; said method being characterized in that said first monomer is a brominated aromatic compound~~ to obtain an aqueous dispersion of a co-polymer.

46. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 45, wherein said brominated aromatic compound has the structure A-B-C, wherein A is a phenyl, substituted with 3-5 bromine atoms, B is a C_1 to C_4 alkyl, optionally substituted with ~~one~~ 1 to 8 bromine atoms, and C is an acrylic or methacrylic group.

47. (Currently Amended) [[A]] The method according to claim ~~45 or~~ 46 wherein the phenyl in said first monomer is substituted with 5 bromine atoms.

48. (Currently Amended) [[A]] The method according to claim ~~45 or~~ 46, wherein the alkyl in said first monomer is CH_2.

49. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 45, wherein said first monomer is PBBMA.

50. (Currently Amended) [[A]] The method according to claim 45, wherein said first monomer is a bromostyrene or a derivative thereof.

51. (Currently Amended) [[A]] The method according to claim 45 ~~any one of claims 45 to 50~~, wherein said second monomer is styrene or a styrene derivative.

52. (Currently Amended) [[A]] The method according to claim 45, ~~any one of claims 45 to 51~~ wherein the amount of said water is sufficient to obtain a ~~such that the obtained~~ dispersion ~~has~~ having at least 40% solid content.

53. (Currently Amended) [[A]] The method according to claim 45 ~~any one of claims 45 to 52~~, wherein the ratio between said first monomer and non-brominated monomers is sufficient to obtain a ~~such that the obtained~~ polymer ~~has~~ having at least 20% (w/w) bromine content.

54. (Currently Amended) [[A]] The method according to claim 45 ~~any one of claims 45 to 53~~, wherein at least one of said surfactants is reactive, and the obtained polymer ~~contains~~ comprises said first monomer, said second monomer, and said reactive surfactant.

55. (Currently Amended) [[A]] The method according to claim 45 ~~any one of claims 45 to 54~~, wherein said first and second monomer react with at least one other monomer, such that the polymer obtained comprises ~~by the method is of~~ said first monomer, said second monomer, and said at least one other monomer.

56. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 55, wherein said at least one other monomer is a specialty monomer.

57. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 56, wherein said specialty monomer is selected from monomers that are cross-linking, surface active, and adhesion promoting.

58. (Currently Amended) [[A]] The method according to claim 56, ~~or 57~~ wherein said specialty monomer is selected from the group consisting of N-(Hydroxymethyl)acrylamide, sodium salt of 2-acrylamido-2-methyl propane sulphonic acid, betal-carboxymethyl acrylate, ammonium allyloxypolyethoxy(10)sulphate, laurethoxy(23)methacrylate, laurethoxy(25) methacrylate, allyl methacrylate, and hydroxyl ethyl methacrylate, glycidyl methacrylate, ammonium salt of α-sulfo-ω-[1-(Alkoxy)methyl-2-(2-propenyloxy) ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl), ammonium salt of α-[1-(Alkoxy)methyl-2-(2-propenyloxy)ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl).

59. (Currently Amended) [[A]] The method according to claim 55, wherein said at least one other monomer is selected from the group consisting of acrylic monomers and vinyl acetate.

60. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 59, wherein said acrylic monomer is selected from the group consisting of acrylamide, acrylic acid, acrylonitrile, butyl acrylate, ethyl acrylate, 2-ethyl hexyl acrylate, and methyl methacrylate.

61. (Currently Amended) [[A]] The method according to claim 55, wherein said at least one other monomer is of the formula $R_1CH=CR_2C(O)A$, wherein

A is selected from the group consisting of OR_3, NR_3R_4, and CN; and

R_1 and R_2 are each independently selected from H and alkyl, said alkyl being linear or branched, and

~~each of~~ R_3 and R_4 are each independently selected from ~~may be~~ H, alkyl, alkenyl, alkoxy, polyalkoxy, alkanol, or ether, each of which may be linear or branched, substituted or unsubstituted.

62. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 61, wherein the carbon-containing R groups have between 1 and 15 carbons.

63. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 62, wherein the alkyl groups have between 1 and 4 carbon atoms.

64. (Currently Amended) [[A]] The method according to claim 45 ~~any one of claims 45 to 63~~, comprising:

(i) dissolving said first monomer in a first liquid to obtain a solution, wherein said first liquid includes said second monomer optionally together with surfactants;

(ii) mixing said solution with water and optionally also with surfactants to obtain a stable emulsion comprising water, surfactants, and said first monomer; and

(iii) reacting said stable emulsion with an initiator to obtain an aqueous dispersion of a co-polymer containing at least said first monomer and said second monomer.

65. (Currently Amended) [[A]] The method according to ~~the preceding~~ claim 64, wherein said first liquid does not ~~include~~ comprise surfactants and in (ii) said solution is mixed with water and surfactants.

66. (New) The polymer according to claim 1, wherein said phenyl is substituted with 5 bromine atoms.

67. (New) A polymer, comprising:

(i) at least one non-brominated monomer comprising a specialty monomer; and

(ii) at least one brominated monomer having the structure A-B-C, wherein

A is a phenyl substituted with 3-5 bromine atoms,

B is a C_1 to C_4 alkyl optionally substituted with 1 to 8 bromine

atoms, and

C is an acrylic or methacrylic group,

wherein the polymer comprises a bromine content of at least 20% (w/w).

68. (New) The polymer according to claim 67, wherein said specialty monomer is selected from monomers that are cross-linking, surface active, and/or adhesion promoting.

69. (New) The polymer according to claim 68, wherein said specialty monomer is selected from the group consisting of sodium salt of 2-acrylamido-2-methyl propane sulphonic acid, betal-carboxymethyl acrylate, ammonium allyloxypolyethoxy(10)sulphate, laurethoxy(23)methacrylate, laurethoxy(25) methacrylate, allyl methacrylate, and hydroxyl ethyl methacrylate, glycidyl methacrylate, ammonium salt of α-sulfo-ω-[1-(Alkoxy)methyl-2-(2-propenyloxy) ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl), ammonium salt of α-[1-(Alkoxy)methyl-2-(2-propenyloxy)ethoxy]-ω-hydro-poly(oxy-1,2,-ethanediyl), ditrimethylo propane tetraacrylate, ethoxilated trimetholopropane triacrylate, and trimethylo propane acrylate.